

# Troubleshooting Error 1601

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## 1.1 Problem

Users are unable to connect to the database and the following error appears in the Sybase error log.

**Error 1601, Severity Level, 21**

**There are not enough 'user connections' available to start a new process. Retry when there are fewer active users, or ask your System Administrator to reconfigure SQL Server with more user connections.**

## 1.2 Explanation

Error 1601 occurs when all user connections are in use and a request is made to create another SQL Server process (i.e. connection). Error 1601 usually appears because the SQL Server is not configured with enough user connections to support all requests.

## 1.3 Resolution

Follow the steps below to use sp\_configure to increase the value of the “number of user connections” configuration parameter.

1. Determine the current number of user connections configured by entering the following command:

```
sp_configure "number of user connections"  
go
```

2. Set the new value for user connections by entering the following command:

```
sp_configure "number of user connections", <new_value>  
go
```

<new\_value> = the new number of user connections.

3. Restart SQL Server to activate the changes.

Depending on the exact configuration of your SQL Server, each user connection typically requires between 40K and 60K of memory regardless of whether or not the connection is in use. Gradually increase the number of user connections until these errors no longer occur.

For more information on determining the number of user connections the SQL Server needs, refer to "number of user connections" in the Sybase System Administration Guide.

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**Note:** This error often appears in the SQL Server error log without the 1601 error number: "kernel: no pss structure available for new process." Take the above action whether or not the error number is displayed.

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